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**NATIONAL STANDARD OF THE  
PEOPLE'S REPUBLIC OF CHINA**

**GB/T 25417-2025**

Replacing GB/T 25417-2010

**Potato planting machine - Technical specifications**

马铃薯种植机 技术规范

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### Foreword

This document is in accordance with the provisions of GB/T 1.1-2020 "Guidelines for standardization work Part 1: Structure and drafting rules for standardization documents" Drafting.

This document replaces GB/T 25417-2010 "Technical requirements for potato planting machines". Compared with GB/T 25417-2010, except for the structure The main technical changes besides adjustments and editorial changes are as follows.

- a) Added terms and definitions (see Chapter 3);
- b) The requirements for product model compilation have been changed (see Chapter 4, Chapter 3 of the 2010 edition);
- c) The technical indicators of the double planting index and missed planting index have been changed (see Table 1, Table 2 of the 2010 version);
- d) Change the qualified rate of planting depth to the qualified rate of seed potato soil thickness (see Table 1, Table 2 of the 2010 edition);
- e) Changed the safety requirements (see 5.1, 4.4 of the 2010 version);
- f) Added adjustment requirements for planting spacing, row spacing, fertilizer application amount, ridge height and ridge width (see 5.2.2);
- g) Added film laying performance requirements (see Table 1);
- h) Added the requirements for ridging performance and drip irrigation tape performance (see Table 1);
- i) Added the qualified rate requirements for the thickness of soil covering the film seedling belt (see Table 1);
- j) Changed the coefficient of variation of fertilizer dosage consistency for each row (see Table 1, Table 2 of the 2010 version);
- k) Added transmission system requirements (see 5.5);
- l) Added requirements for furrow openers (see 5.6);

- m) Added hydraulic system requirements (see 5.7);
- n) Added requirements for air-suction seed metering devices (see 5.8);
- o) Added the requirements for operation monitoring system (see 5.9);
- p) Added the strength grade and tightening torque requirements for fasteners in important locations (see 5.10.4);
- q) Changed the whole machine transportation clearance (see 5.10.6, 4.1.9 of the 2010 version);
- r) Added inspections for qualified rate of spacing between seeds and fertilizers, mechanical damage degree of light-collecting surface, qualified rate of thickness of film-covered soil, qualified rate of width of film-covered soil Test method [see 6.5.5c), 6.5.6];
- s) Added the testing methods for qualified rate of ridge spacing, qualified rate of ridge height and qualified rate of ridge top width (see 6.5.7~6.5.9);
- t) Added the test method for the longitudinal elongation of drip irrigation tape (see 6.5.11);
- u) Added detection methods for operation monitoring systems (see 6.5.14);
- v) Added the detection method of hydraulic system (see 6.6.5);
- w) Changed the classification of non-conforming items (see Table 4, Table 3 of the 2010 version);
- x) The sampling determination scheme has been changed (see Table 5, Table 4 of the 2010 version);
- y) Added the method for determining the longitudinal tensile strength of ground film (see Appendix A).

Please note that some of the contents of this document may involve patents. The issuing organization of this document does not assume the responsibility for identifying patents.

This document was proposed by the China Machinery Industry Federation.

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The previous versions of this document and the documents it replaces are as follows.

- This document was first published as GB/T 25417-2010;
- This is the first revision.

## 1 Scope

This document specifies the product model, technical requirements, inspection rules, marking, packaging, transportation and storage of potato planters, and describes the corresponding test method.

This document applies to the manufacture of mounted and trailed potato planters.

## 2 Normative references

GB/T 230.1

GB/T 699

GB/T 1173-2013

GB/T 1243

GB/T 1593

GB/T 3077-2015

GB/T 3098.1-2010

GB/T 3098.2-2015

GB/T 3766

GB/T 5262-2008

GB/T 5667

GB/T 6242-2006

GB/T 9239.1

GB/T 9478-2005

GB/T 9480

GB 10395.1

GB 10395.9

GB 10396

GB/T 13306

GB 13735

GB/T 23821

GB/T 35383-2017

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